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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,020	11/10/2005	Hee Hyeok Hahm	123051-05040286	7877
22429 7590 12/12/2007 LOWE HAUPTMAN HAM & BERNER, LLP 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314			EXAMINER TORRES, MARCOS L	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 12/12/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/530,020	Applicant(s) HAHM ET AL.	
	Examiner Marcos L. Torres	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 2 and 11 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3 of copending Application No. 10/23,787. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the claimed limitations are transparently found in the copending application with obvious wording variations. See

the following table of comparing claim 1 of pending Application and the claim 1 of
copending Application 10/523,787.

Application 10/530,020	Co-pending Application 10/523,787
1. A method of providing a predetermined sound as an RBT (RingBack Tone) in a communication network, said method comprising:	1. A method of providing an arbitrary sound as an RBT (RingBack Tone) in a communication network, comprising:
an HLR (Home Location Register) furnishing a call-originating exchanger with information on whether or not an RBT is to be replaced for a called terminal through a response message to a location request message received from the call-originating exchanger that sends the location request message to the HLR when a call connection is requested by a caller to the called terminal;	a first step, conduct by an HLR (Home Location Register) furnishing a call-originating exchanger with information on whether an RBT is to be replaced or not and second information informing a route to sound providing means through a response message to a location request message received from the call-originating exchanger that sends the location request message to the HLR when a call connection is requested by a caller to the called terminal;
the call-originating exchanger searching for a sound code assigned to the called	a second step, conducted by the call-originating exchanger, of requesting a

terminal based on the information included in the response message; and	trunk connection to both of a call-terminating exchanger and the sound providing means based on the response including the first and the second information while furnishing the sound providing means with information identifying a called;
the call-originating exchanger providing the caller with a pre-stored RBT-replacing sound associated with the found sound code as an RBT while requesting a trunk connection to a call-terminating exchanger associated with the called terminal based on the response message.	a third step, conducted by the sound providing means, of selecting an RBT-replacing sound based on the called identifying information, and providing the selected RBT-replacing sound for a caller through the call-originating exchanger the trunk connection is made to.
	3. The method of claim 1, wherein the sound providing means searches for the selected RBT-replacing sound specified for the called through communication with a storager controller operating based on internet protocol.

As shown above, Application 10/530,020 and co-pending Application 10/523,787 both are directed to a method of providing a predetermined sound as an RBT (RingBack Tone) in a communication network. The difference between the two applications is that claim 1 of co-pending application 10/523,787 does not specifically teach the limitation "the call-originating exchanger searching for a sound code assigned to the called terminal based on the information included in the response message". However, claim 1 of co-pending Application 10/523,787 teaches "second information informing a route to sound providing means" and "furnishing the sound providing means with information identifying a called", and claim 3 of co-pending Application 10/523,787 teaches "the sound providing means searches for the selected RBT-replacing sound specified for the called" such that it obviously includes a searching step as recited in Application 10/530,020. Thus, it would have been obvious to one of ordinary skill in the art to recognize the claimed subject matter of Application 10/530,020 is not patentably distinct from the subject matter claimed in co-pending Application 10/523,787.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 1-6 and 11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4 and 6-10 of U.S. Patent No. 7,242,757. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed limitations are transparently found in the

copending application with obvious wording variations. See the following table of comparing claim 1 of pending Application and the claim 1 of U.S. Patent No. 7,242,757.

Application 10/530,020	US Patent No. 7,242,757
1. A method of providing a predetermined sound as an RBT (RingBack Tone) in a communication network, said method comprising:	1. A method of providing an arbitrary sound as an RBT (RingBack Tone) in a communication network, comprising:
an HLR (Home Location Register) furnishing a call-originating exchanger with information on whether or not an RBT is to be replaced for a called terminal through a response message to a location request message received from the call-originating exchanger that sends the location request message to the HLR when a call connection is requested by a caller to the called terminal;	a first step, conduct by an HLR (Home Location Register) furnishing a call-originating exchanger with information on whether or not an RBT is to be replaced for a terminal through a response to a location request message received from the call-originating exchanger that sends the location request message to the HLR when a call connection is requested to the called terminal;
the call-originating exchanger searching for a sound code assigned to the called terminal based on the information included in the response message; and	a second step, conducted by the call-originating exchanger, of requesting a trunk connection to a call-terminating exchanger based on the response, and

	further requesting another trunk connection to a sound providing means based on the information with reference to preset routing information to the sound providing means while furnishing the sound providing means with information to identify the terminal;
the call-originating exchanger providing the caller with a pre-stored RBT-replacing sound associated with the found sound code as an RBT while requesting a trunk connection to a call-terminating exchanger associated with the called terminal based on the response message.	a third step, conducted by the sound providing means, of selecting an RBT-replacing sound based on the called identifying information, and providing the selected RBT-replacing sound for a caller through the call-originating exchanger the trunk connection is made to.

As shown above, Application 10/530,020 and U.S. Patent No. 7,242,757 both are directed to a method of providing a predetermined sound as an RBT (RingBack Tone) in a communication network. The different between the two applications is that claim 1 of U.S. Patent No. 7,242,757 does not specifically teach the limitation "the call-originating exchanger searching for a sound code assigned to the called terminal based on the information included in the response message". However, claim 1 of U.S. Patent No. 7,242,757 teaches "second information informing a route to sound providing means"

and "further requesting another trunk connection to a sound providing means based on the information with reference to preset routing information to the sound providing means while furnishing the sound providing means with information to identify the terminal", which obviously including a searching step as recited in Application 10/530,020. Thus, it would have been obvious to one of ordinary skill in the art to recognize the claimed subject matter of Application 10/530,020 is not patentably distinct from the subject matter claimed in U.S. Patent No. 7,242,757. Furthermore, the claimed limitations recited in claims 3-4 are the same as claims 5-6 in Application 10/530,020, which is also similar to the claimed limitations as recited in claims 7-8 of U.S. Patent No. 7,242,757.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Park 10-0292089.

As to claim 11, Park discloses a method of providing a caller with a pre-stored sound chosen by a called subscriber instead of a standard RBT (Ring Back Tone), said method comprising: an HLR (Home Location Register), in response to a location request message received from a call-originating exchanger associated with the caller, furnishing a call-terminating exchanger associated with the called subscriber the call-

terminating exchanger with information on whether or not an RBT is to be replaced for the called subscriber; said call-terminating exchangers then searching for a sound code assigned to the called terminal based on the information furnished by the HLR; and said call-terminating exchangers subsequently providing the caller with an RBT-replacing sound, which is pre-stored locally at said one of the call-originating and call-terminating exchangers and associated with the found sound code, as an RBT (see page 16, line 17 – col. 19, line 6).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 12 and 18-20 are rejected under 35 U.S.C. 103(a) as being obvious over Park in view of Skog 6427076.

As to claim 12, Park discloses everything as explained above except for the method further comprising the HLR maintaining, for each subscriber, a profile that includes information on whether or not an RBT is to be replaced for the subscriber when called. In an analogous art, SKOG discloses the use of an HLR for the subscriber database. As shown in SKOG, the MSC is associated to a HLR, which stores all management data relating to all mobile stations in the network (115-Figure 1 and Figure 2; abstract; column 5: line 31-column 6:line 3). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of PARK to include the HLR as the subscriber database of claim 1, as an HLR is inherently used to store subscriber data relating to value added services such as RBT. This is beneficial it allows PARK to analyze the provided information from a database already established in wireless networks. As with other services available via landline telephones (e.g. caller ID, special ring tones, 3 way calling, call waiting, internet usage, etc.), users accustomed to having the service would also like to have the same abilities with their wireless telephone.

As to claim 19, Park discloses method wherein said information is forwarded from the HLR to the call-terminating exchanger in a routing information request message that requests the call-terminating exchanger to furnish routing information necessary for establishing a connection between the exchangers (see page 16, line 17 – col. 19, line 6).

As to claim 20, Park and Skog disclose the method further comprising the call-originating exchanger requesting the call-terminating exchanger to establish a trunk connection; wherein the call-terminating exchanger searches for the sound code in response to the call- originating exchanger's request for a trunk connection (see page 16, line 17 – col. 19, line 6).

11. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Skog as applied to claim 11 above, and further in view of Hahm US007242756B2.

As to claim 13, Park and Skog disclose everything as explained above except for the method wherein said one of the call-originating and call-terminating exchangers is the call-originating exchanger. In an analogous art, Hahm discloses the method wherein said one of the call-originating and call-terminating exchangers is the call-originating exchanger (see col. 2, line 60 - col. 3, line 19). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use the call-originating exchanger for the simple purpose of faster response.

As to claim 14, Park disclose the method wherein said information is returned from the HLR to the call-originating exchanger in a response message which also

includes routing information furnished by the call-terminating exchanger (see page 17, line 2 – page 19, line 10).

As to claim 15, Park and Skog disclose everything as explained above except for discloses method further comprising the call-originating exchanger requesting the call-terminating exchanger to establish a trunk connection; wherein the call-originating exchanger searches for the sound code before requesting the call-terminating exchanger to establish a trunk connection. In an analogous art, Hahm discloses method further comprising the call-originating exchanger requesting the call-terminating exchanger to establish a trunk connection; wherein the call-originating exchanger searches for the sound code before requesting the call-terminating exchanger to establish a trunk connection (see fig. 1). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use the call-originating exchanger for the simple purpose of faster response.

As to claim 16, Park and Skog disclose everything as explained above except for the method wherein the call-originating exchanger receives the found sound code before requesting the call-terminating exchanger to establish a trunk connection. In an analogous art, Hahm discloses the method wherein the call-originating exchanger receives the found sound code before requesting the call-terminating exchanger to establish a trunk connection (see col. 5, line 53 – col. 6, line 11). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use the call-originating exchanger for the simple purpose of faster response.

As to claim 17, Park and Skog disclose everything as explained above except for the method wherein the call-originating exchanger requests the call-terminating exchanger to establish a trunk connection and provides the caller with the RBT-replacing sound at the same time. In an analogous art, Hahm discloses method of claim 16, wherein the call-originating exchanger requests the call-terminating exchanger to establish a trunk connection and provides the caller with the RBT-replacing sound at the same time (see col. 5, line 53 – col. 6, line 11). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use the call-originating exchanger for the simple purpose of faster response.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Hand delivered responses should be brought to:

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcos L. Torres whose telephone number is 571-272-7926. The examiner can normally be reached on 8:00am-6:00 PM alt. Wednesday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-252-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Marcos L Torres
Examiner
Art Unit 2617

mlt


GEORGE ENG
SUPERVISORY PATENT EXAMINER